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| 10/040,799 | 01/07/2002 | Leonard E. Frey | END920010075US1 | 2893 |

7590 01/04/2005

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| EXAMINER |
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CHANNAVAJJALA, SRIRAMA T

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| ART UNIT | PAPER NUMBER |
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2164

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,799

Applicant(s)

FREY ET AL.

Examiner

Srirama Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges applicant's amendment filed on 8/12/2004.
2. *Claims 1,8,15 have been amended [8/12/2004].*
3. Claims 1-19 pending in this application.

Drawings

4. The drawings filed on 1/7/2002 are accepted for examination purpose.

Information Disclosure Statement

5. The information disclosure statement filed on 1/7/2002, paper no. # 2 has been considered and a copy was enclosed with this office action, paper no. # 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-2, 4,6-9,11,13-16,18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Draper et al., [hereafter Draper], US Patent No. 6192365 in view of Chandrasekaran et al., [hereafter Chandrasekaran], US Patent No. 6738971.

7. As to Claims 1,8,15, Draper teaches a system which including 'processing transactions' [col 2, line 49-51], processing transactions corresponds to managing transaction in a network as detailed in col 2, line 49-51;

'providing a plurality of processing databases each having a respective agent' [fig 2, col 5, line 6-13, col 6, line 5-8], plurality of processing databases corresponds to fig 2, elements 28, 40, and their respective agent corresponds to fig 2, element 44 as detailed in fig 2;

'providing a transaction database' [col 3, line 16-21], transaction database corresponds to transactions in the transaction log as detailed in col 3, line 16-21;

'writing one or more transactions, each having a key and a detail, from a first of said plurality of processing databases to said transaction database' [col 13, line 25-30];

'periodically searching, using a processing agent from a second of said plurality of processing databases' [col 13, line 42-46, col 14, line 49-51]; 'transaction database for a key and detail to determine whether said processing agent should process said one or more transactions' [col 14, line 52-63];

'updating a record in said second of said plurality of processing databases, by using said key and detail' [col 13, line 46-49, line 53-58].

It is however, noted that Draper does not specifically teach 'databases of plurality of types', plurality of databases having a different type than said first of said plurality of databases', although Draper teaches distributed transactional databases that allows database manager to access and manipulate individual database objects [see Abstract, fig 1-2]. On the other hand, Chandrasekaran specifically teaches 'databases of plurality of types' [fig 2], databases plurality of types corresponds to Chandrasekaran's fig 2, element 110,112; 'plurality of databases having a different type than said first of said plurality of databases' col 2, line 10-17, col 3, line 65-67, col 4, line 1], different type of databases corresponds to database system 104 and 106 because one database system may be IBM DB2 database, while other database system may be ORACLE database system as suggested by Chandrasekaran at col 2, line 10-17.

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Chandrasekaran into Draper et al. because both Chandrasekaran, Draper are directed to distributed databases, more specifically Draper is directed to updating operations performed on databases transaction keeping the transaction log that represents sequence of transactions [see Abstract, col 2, line 49-57], while Chandrasekaran is directed to distributed transactions where transactions including first and second changes communicate with each other through the use of gateway device [see Abstract, col 5, line 7-13,fig 1].

One of the ordinary skill in the art at the time of applicant's invention would have been motivated to combine the references because that would have allowed users of Ddraper et al. to use different databases may be connected in a distributed transactions to communicate changes with each other while preserving the integrity of transactions, furthermore, resource manager allows to coordinate the committing of a distributed transactions as suggested by Chandrasekaran [col 4, line 50-64], thus improving the quality and reliability of transaction updates.

8. As to Claim 2,9,16, Draper teaches a system which including 'transaction database is a messaging database' [see fig 2, col 12, line 24-26].

9. As to Claim 4, 11,18, Draper teaches a system which including 'one or more transactions has a processor designation specifying which of said plurality of processing databases is affected by said each of said one or more transactions' [col 5, line 26-37].

10. As to Claims 6,13, Draper teaches a system which including 'transferring said one or more transactions from said transaction database to said second of said plurality of processing databases prior to said step of updating a record' [col 13, line 20-24, line 25-36].

11. As to Claims 7,14,19, Draper teaches a system which including 'setting a status flag in said one or more transactions' [col 28, line 38-41].

12. Claims 3,5,10,12,17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Draper et al., [hereafter Draper], US Patent No. 6192365, Chandrasekaran et al., [hereafter Chandrasekaran], US Patent No. 6738971 as applied to claim 1, 8,15 above, and further in view of Bowen et al., [hereafter Bowen], US Patent No. 6094649.

13. As to Claim 3, 10, Draper and Chandrasekaran teaches a system which including 'transaction database, plurality of processing databases' [Draper see fig 2; Chandrasekaran: Abstract, fig 1]. It is however, noted that both Draper, and Chandrasekaran do not specifically teach 'LOTUS NOTES database'. On the other hand, Bowen disclosed "LOTUS NOTES database' [col 11, line 42-44].

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Bowen et al. into transaction log management of Draper et al. Chandrasekaran's distributed transaction system because they are directed to managing database records in a distributed network, both are directed to indexing records [see Draper: col 25, line 1-8; Chandrasekaran: Abstract, fig 1, Bowen: fig 2, element 212, 214], more specifically Draper is directed to managing transaction log containing updates that represents operations performed on a database replica in a network [see Abstract]; Chandrasekaran is directed to distributed

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transactions where transactions including first and second changes communicate with each other through the use of gateway device [see Abstract, col 5, line 7-13, fig 1], while Bowen is directed to keyword searching in a structured databases, more specifically selected data records are retrieved using query mechanism as detailed in Abstract.

One of the ordinary skill in the art at the time of applicant's invention would have been motivated to combine the references because that would have allowed uses of Draper, Chandrasekaran to use indexing agent that associated with keywords to search specific transaction related information from multiple relational and other databases to satisfy his or her needs, thus improving database management system using Lotus Notes as suggested by Bowen et al., [col 4, line 4-10].

14. As to Claim 5, 12, 17, Bowen disclosed 'key includes a wildcard character' [col 5, line 59-65].

Response to Arguments

15. Applicant's arguments filed on 8/12/2004 with respect to claims 1-19 have been fully considered but they are not persuasive, for examiners' response see the discussion below:

a) At page 6, claims 1,8,15, applicant argues that applicant's claims 1,8,15, as amended above, specifically require transactions between databases having a different type, Draper therefore does not anticipate claims 1,8,15...

As to the above argument [a], Although Draper et al., teaches distributed databases, more specifically transactions among distributed databases using log management that keeps transaction sequence [see col 2, line 49-53, col 3, line 16-18], Draper does not specifically teach 'databases of plurality of types', plurality of databases having a different type than said first of said plurality of databases', although Draper teaches distributed transactional databases that allows database manager to access and manipulate individual database objects [see Abstract, fig 1-2]. On the other hand, Chandrasekaran specifically teaches 'databases of plurality of types' [fig 2], databases plurality of types corresponds to Chandrasekaran's fig 2, element 110,112; 'plurality of databases having a different type than said first of said plurality of databases' col 2, line 10-17, col 3, line 65-67, col 4, line 1], different type of databases corresponds to database system 104 and 106 because one database system may be IBM DB2

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database, while other database system may be ORACLE database system as suggested by Chandrasekaan at col 2, line 10-17.

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Chandrasekaran into Draper et al. because both Chandrasekaran, Draper are directed to distributed databases, more specifically Draper is directed to updating operations performed on databases transaction keeping the transaction log that represents sequence of transactions [see Abstract, col 2, line 49-57], while Chandrasekaran is directed to distributed transactions where transactions including first and second changes communicate with each other through the use of gateway device [see Abstract, col 5, line 7-13, fig 1].

One of the ordinary skill in the art at the time of applicant's invention would have been motivated to combine the references because that would have allowed users of Ddraper et al. to use different databases may be connected in a distributed transactions to communicate changes with each other while preserving the integrity of transactions, furthermore, resource manager allows to coordinate the committing of a distributed transactions as suggested by Chandrasekaran [col 4, line 50-64], thus improving the quality and reliability of transaction updates.

Examiner applies the above discussed argues to the dependent claims 3,5,10,12,17 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Draper et al., [hereafter Draper], US Patent No. 6192365, Chandrasekaran et al.,

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[hereafter Chandrasekaran], US Patent No. 6738971 as applied to claim 1, 8, 15 above, and further in view of Bowen et al., [hereafter Bowen], US Patent No. 6094649.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

The prior art made of record

- a. US Patent No. 6192365
- b. US Patent No. 6094649
- c. US Patent No. 6738971

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popvici, can be reached on 571-272-.4083. The fax phone numbers for the organization where the application or proceeding is assigned is 703/872-9306

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

sc
Patent Examiner.
December 27, 2004


SRIRAMA CHANNAVAJJALA
PRIMARY EXAMINER